Application No. 09/674,971 Arr endment dated May 16, 2005 Reply to Office Action of December 15, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-28 (cancelled).

 (currently amended) A method of inserting an artificial implant into a disc space between two adjacent vertebral bodies, the method comprising the steps of:

providing an artificial implant having an upper surface and a lower surface, the upper and lower surfaces being at least arcuate in part and adapted to contact an adjacent vertebral body, the implant having a generally non-linear trailing end being configured to generally conform to at least a portion of the natural anatomical curvature of at least one of the anterior and lateral aspects of the vertebral bodies:

forming an opening across <u>a height of</u> the disc space and into a portion of each of the adjacent vertebral bodies, the opening being at least in part curved across the height of the disc space;

inserting the implant into the opening; and

aligning the trailing end of the Implant with the anatomical curvature of the adjacent vertebral bodies so that a <u>majority of</u> the trailing end of the implant is aliqued with the anatomical curvature of the adjacent vertabral bodies and does not substantially protrude from the spine.

- (original) The method of claim 29, further comprising the step of attaching a
 driver instrument to the implant to insert the implant into the opening formed
 during the step of forming.
- 31. (original) The method of claim 29, wherein the implant is a fusion implant having a hollow therein, further comprising the step of loading the implant with a fusion promoting material prior to the step of inserting.

Application No. 09/674,971 Arrendment dated May 16, 2005 Reply to Office Action of December 15, 2004

- 32. (original) The method of claim 31, wherein the fusion promoting material includes at least one of bone, coral, bone morphogenetic protein, and genes coding for the production of bone.
- (original) The method of claim 29, further comprising the step of combining the 33. implant with a fusion promoting material.
- 34. (original) The method of claim 33, wherein the fusion promoting material includes at least one of bone, coral, bone morphogenetic protein, and genes coding for the production of bone.
- 35. (original) The method of claim 29, wherein the step of forming includes the substep of drilling the opening.
- (original) The method of claim 29, wherein the step of inserting includes linearly 36. inserting the implant into the opening.
- 37. (original) The method of claim 29, wherein the step of inserting includes rotating the implant into the opening.
- 38. (original) The method of claim 29, wherein the step of inserting includes screwing the implant into the opening.
- (currently amended) A method of inserting a pair of artificial implants into a disc 39. space between two adjacent vertebral bodies, the method comprising the steps of:

providing a first artificial implant having a width less than one half the width of the disc space and a generally non-linear trailing end being configured to generally conform to at least a portion of the natural anatomical curvature of at least one of the anterior and lateral aspects of the vertebral bodies:

providing a second artificial implant having a width less than one half the width of the disc space and a generally non-linear trailing end being configured to generally conform to at least a portion of the natural anatomical curvature of at least one of the anterior and lateral aspects of the vertebral bodies;

forming at least one opening across a height of the disc space and into a portion of each of the adjacent vertebral bodies, the at least one opening being at least in part curved across the height of the disc space:

Application No. 09/674,971 Arr endment dated May 16, 2005 Reply to Office Action of December 15, 2004

Inserting the first implant into the at least one opening; inserting the second implant into the at least one opening; and aligning the trailing end of each implant with the anatomical curvature of the adjacent vertebral bedies so that a majority of the trailing end of each implant is aligned with the anatomical curvature of the adjacent vertebral bodies and does not substantially protrude from the spine.

- (original) The method of claim 39, wherein at least one of said providing steps includes providing an implant with an asymmetrical trailing end.
- (original) The method of claim 39, wherein each of said providing steps includes providing an implant with a symmetrical trailing end.
- 42. (original) The method of claim 39, wherein each implant is a fusion implant having a hollow therein, further comprising the step of loading each implant with fusion promoting material prior to the steps of inserting.
- 43. (original) The method of claim 42, wherein the fusion promoting material includes at least one of bone, coral, bone morphogenetic protein, and genes coding for the production of bone.
- (original) The method of claim 39, further comprising the step of combining at least one of the implants with a fusion promoting material.
- 45. (original) The method of claim 44, wherein the fusion promoting material includes at least one of bone, coral, bone morphogenetic protein, and genes coding for the production of bone.
- (original) The method of claim 39, wherein the step of forming includes the substep of drilling the at least one opening.
- (original) The method of claim 39, wherein each of the steps of inserting includes linearly inserting the implant into the at least one opening.
- (original) The method of claim 39, wherein each of the steps of inserting includes rotating the implant into the at least one opening.
- (original) The method of claim 39, wherein each of the steps of inserting includes screwing the implant into the at least one opening.

Application No. 09/674,971 Amendment dated May 16, 2005 Reply to Office Action of December 15, 2004

- 50. (new) The method of claim 29, wherein the step of aligning includes aligning a majority of the trailing end of the implant along the apophyseal rim of at least one of the adiacent vertebral bodies.
- 51. (new) The method of claim 29, wherein the step of providing includes providing the trailing end of the implant with a curved portion generally corresponding to the natural curvature of at least one of the anterior and lateral aspects of the vertebral bodies.
- 52. (new) The method of claim 39, wherein the step of aligning includes aligning a majority of the trailing end of each implant along the apor hyseal rim of at least one of the adjacent vertebral bodies.
- 53. (new) The method of claim 39, wherein the step of providing includes providing the trailing end of at least one of the implants with a curved portion generally corresponding to the natural curvature of at least one of the anterior and lateral aspects of the vertebral bodies.